



UNITED STATES
PATENT AND
TRADEMARK OFFICE

SEPTEMBER 04, 2002

CORNING INCORPORATED
VINCENT T. KUNG
PATENT DEPARTMENT SP-T1-03-1
CORNING, NY 14831

PTAS

Received

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

SEP 10 2002

Patent Dept.



102147749A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/01/2002

REEL/FRAME: 013050/0287
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

TANNER, CAMERON W.

DOC DATE: 05/20/2002

ASSIGNOR:

TEPESCH, PATRICK D.

DOC DATE: 05/20/2002

ASSIGNOR:

WUSIRIKA, RAJA R.

DOC DATE: 06/10/2002

ASSIGNEE:

CORNING INCORPORATED
PATENT DEPT.; SP-T1-03-1
CORNING, NEW YORK 14831

SERIAL NUMBER: 10101135
PATENT NUMBER:

FILING DATE: 03/18/2002
ISSUE DATE:

SEP - 10

013050/0287 PAGE 2

LAZENA MARTIN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

07-09-2002



Case Name: SP00-391B

To the Honorable Com

102147749

2 SHEET

use record the attached documents or copy thereof.

- (1) Conveying Party(ies): Cameron W. Tanner
Patrick D. Tepesch
Raja R. Wusirika

Title: POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS

Additional name(s) of conveying party(ies) attached? Yes ☐ No ☒

- (2) Receiving Party: Corning Incorporated
Patent Dept.; SP-TI-03-1
Corning, NY 14831

07/01/02

- (3) Nature of conveyance: Assignment executed: 05-20-2002, 05-20-2002 and 06-10-2002.

- (4) Application number(s) and/or patent number(s) against which this assignment is to be recorded:

A. Patent Application No.(s): 10/101,135
Filing date: March 18, 2002

B. Patent No.(s):
Filing date:

If this document is being filed together with a new application, this assignment is also to be recorded against said application, executed on _____.

- (5) Name and address of party to whom correspondence concerning document should be mailed:

Name: Vincent T. Kung
Reg. No. 45,797
Corning Incorporated
Patent Department
SP-TI-03-1
Corning, NY 14831
Phone No.: (607) 974-0608

RECEIVED
JUN 24 19 07
FINANCE SECTION

- (6) Total Number of applications and/or patents involved: one

- (7) Total Fee = \$40.00

☐ Enclosed (Check No.)
☐ Included with filing fee. Check No. ____
☒ Authorization given by Corning Incorporated to charge deposit account number 03-3325.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Vincent T. Kung

June 24, 2002
Date

Total number of pages comprising cover sheet: five (5)

ASSIGNMENT

FOR VALUE RECEIVED, I, as a below named inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York, (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS**, such inventions being generally described in an application for Letters Patent of the United States executed on

DATE 6-10-2002

and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

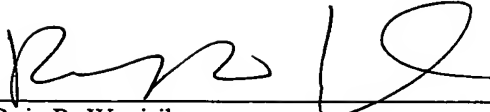
(U.S. Regular Application)

Attorney Docket No.: SP00-391B

Signed at Corning, NY, this

6/10/02

Date



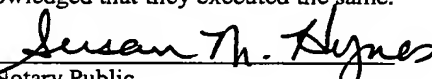
Raja R. Wusirika

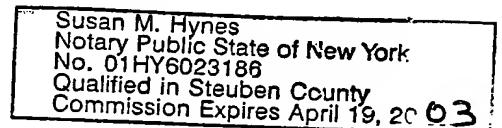
State of New York)

: ss.

County of Steuben)

On the 10TH day of JUNE 2002, before me personally came **Raja R. Wusirika** known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.


Notary Public



ASSIGNMENT

FOR VALUE RECEIVED, I, as a below named inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York, (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS**, such inventions being generally described in an application for Letters Patent of the United States executed on

DATE 5-20-2002
DATE 5-20-2002

and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

(U.S. Regular Application)

Attorney Docket No.: SP00-391B

Signed at Corning, NY, this

5-20-2002

Date

5/20/02

Date

Cameron W. Tanner
Cameron W. Tanner

Patrick D. Tepesch
Patrick D. Tepesch

State of New York)

: ss.

County of Steuben)

On the 20th day of MAY 2002, before me personally came **Cameron W. Tanner** known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Susan M. Hynes
Notary Public

State of New York)

: ss.

County of Steuben)

On the 20th day of MAY 2002, before me personally came **Patrick D. Tepesch** known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Susan M. Hynes
Notary Public

Susan M. Hynes
Notary Public State of New York
No. 01HY6023186
Qualified in Steuben County
Commission Expires April 19, 20 03

As a below named inventor, I declare that:

My residence, Post Office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS**.

The specification of which (check only one item below):

- ☐ is attached hereto
- ☒ was filed as United States Application Serial No. 10/101,135 on March 18, 2002 and was amended on (if applicable)
- ☐ was filed as PCT international application number , on , and was amended under PCT Article 19 on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate, on the same subject matter, having a filing date before that of the application on which priority is claimed:

<input type="checkbox"/>	Country:	Application No.:	Filing Date:
<input checked="" type="checkbox"/>	NONE		

I hereby claim the benefit under Title 35 United States Code § 119(e) and § 120 of any United States application(s) or 365(c) of any PCT international application designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37 Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<input type="checkbox"/>	Provisional No.:	Filed:	Status:
<input checked="" type="checkbox"/>	Application No.: 09/650,885	Filed: August 30, 2000	Status: Pending
	PCT Application No:	Filed:	Status:
<input type="checkbox"/>	NONE		

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

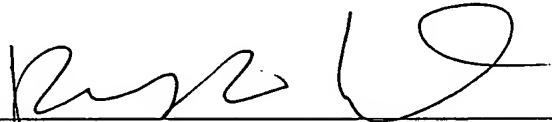
Full Name of Inventor: Raja R. Wusirika

Resident Address: 101 West Hill Terrace, Painted Post, NY 14870

Post Office Address: same

Citizenship:

DATE: 6/10/02



Raja R. Wusirika

As a below named inventor, I declare that:

My residence, Post Office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS**.

The specification of which (check only one item below):

- ☐ is attached hereto
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<input type="checkbox"/>	Country:	Application No.:	Filing Date:
<input checked="" type="checkbox"/>	NONE		

I hereby claim the benefit under Title 35 United States Code § 119(e) and § 120 of any United States application(s) or 365(c) of any PCT international application designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37 Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<input type="checkbox"/>	Provisional No.:	Filed:	Status:
<input checked="" type="checkbox"/>	Application No.: 09/650,885	Filed: August 30, 2000	Status: Pending
	PCT Application No:	Filed:	Status:
<input type="checkbox"/>	NONE		

DECLARATION IN ORIGINAL APPLICATION

U.S. Attorney Docket No.: SP00-391B

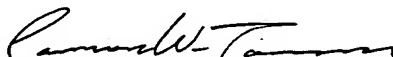
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor: Cameron W. Tanner

Resident Address: 37 Pine Forest Drive, Horseheads, New York 14845
Post Office Address: same

Citizenship: UNITED STATES

DATE: 5-20-2002


Cameron W. Tanner

Full Name of Inventor: Patrick D. Tepesch

Resident Address: 179 Watauga Avenue, Corning, New York 14830
Post Office Address: same

Citizenship: UNITED STATES

DATE: 5/20/02


Patrick D. Tepesch

(U.S.)

Attorney Docket No.: SP00-391B

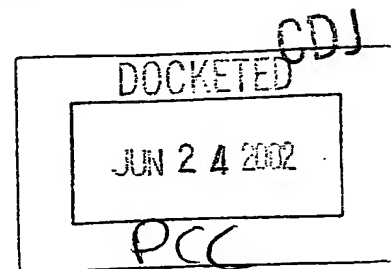
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Tanner, et al
Serial No.: 10/101,135
Filed: March 18, 2002
For: POROUS INORGANIC SUBSTRATE
FOR HIGH-DENSITY ARRAYS

**COMBINED
CERTIFICATE UNDER
37 C.F.R. § 3.73(b)
and
POWER OF ATTORNEY**

Assistant Commissioner for Patents
Washington, DC 20231

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)



CORNING INCORPORATED, a New York corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. A true copy of the unrecorded Assignment is attached hereto.

The undersigned has reviewed the above referenced assignment of the patent application identified above and, to the best of the undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

(U.S.)

Attorney Docket No.: SP00-391B

POWER OF ATTORNEY BY ASSIGNEE

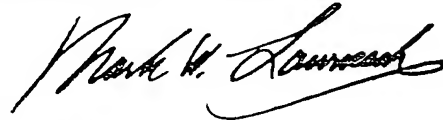
CORNING INCORPORATED, the assignee of the full and exclusive right, title and interest in and to the accompanying application for United States Letters Patent entitled **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS** and executed by Cameron W. Tanner, Patrick D. Tepesch and Raja R. Wusirika on 05-20-2002, 05-20-2002 and 06-10-2002, respectively, appoints the practitioners associated with the Customer Number provided below (i.e., the practitioners associated with the Intellectual Property Department, Corning Incorporated) to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith. Please direct all correspondence to Vincent T. Kung at the address associated with that Customer Number.

Customer Number: 22928

CORNING INCORPORATED

Date: June 24, 2002

By



Mark W. Lauroesch
Assistant Secretary

ASSIGNMENT

FOR VALUE RECEIVED, I, as a below named inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York, (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **POROUS INORGANIC SUBSTRATE FOR HIGH-DENSITY ARRAYS**, such inventions being generally described in an application for Letters Patent of the United States executed on

DATE 6-10-2002

and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

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I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at Corning, NY, this

6/10/02

Date

Raja R. Wusirika

State of New York)

: ss.

County of Steuben)

On the 10TH day of JUNE 2002, before me personally came Raja R. Wusirika known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Susan M. Hynes
Notary Public

Susan M. Hynes
Notary Public State of New York
No. 01HY6023186
Qualified in Steuben County
Commission Expires April 19, 2003

ASSIGNMENT

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Signed at Corning, NY, this

5-20-2002

Date

5/20/02

Date

Cameron W. Tanner
Cameron W. Tanner

Patrick D. Tepesch
Patrick D. Tepesch

State of New York)

: ss.

County of Steuben)

On the 20th day of MAY 2002, before me personally came **Cameron W. Tanner** known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Susan M. Hynes
Notary Public

State of New York)

: ss.

County of Steuben)

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Susan M. Hynes
Notary Public

Susan M. Hynes
Notary Public State of New York
No. 01HY6023186
Qualified in Steuben County
Commission Expires April 19, 20 03

Susan M. Hynes
Notary Public State of New York
No. 01HY6023186
Qualified in Steuben County
Commission Expires April 19, 20 03